

Farm Machinery and Lawn and Garden Equipment: 2003

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SUMMARY OF FINDINGS

During 2003, factory shipments of farm machinery and equipment, including parts and attachments, produced by original equipment manufacturers (OEM), totaled \$12,846.6 million, a 6-percent increase from the 2002 shipments of \$12,392.8 million. Shipments of farm dairy machines, sprayers, dusters, elevators, farm blowers, and

parts totaled \$734.6 million, a 1-percent decrease from the 2002 total of \$742.1 million. The value of shipments for planting, seeding, and fertilizing machinery for 2003 was \$897.6 million, up 5 percent from the 2002 value of \$851.4 million. The value of shipments for harvesting machinery and parts are relatively the same, from \$1,613.5 million in 2002 to \$1,625.1 million in 2003. Haying machinery and parts increased 28 percent, from \$1,172.4 million in 2002 to \$1,496.4 million in 2003.

The value of shipments for commercial turf and grounds care equipment, including parts, was \$1,836.3 million in 2003, an 8-percent increase from the \$1,697.2 million reported for 2002.

The value of shipments for consumer lawn, garden, and snow equipment, including parts and attachments, was \$6,715.6 million in 2003, compared to \$5,939.3 million in 2002.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Vance Davis, 301-763-4790.

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U S C E N S U S B U R E A U

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Economics and Statistics Administration
U.S. CENSUS BUREAU

Table 1. Value of Shipments of Farm Machinery and Lawn and Garden Equipment by Type of Equipment: 1998 to 2003
[Value in millions of dollars]

| Product description | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 |
|-----------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|
| Farm dairy machines, sprayers, dusters, elevators, and farm blowers 1/..... | 734.6 | 742.1 | 745.8 | 877.4 | 816.8 | 993.6 |
| Planting, seeding, and fertilizing machinery 1/..... | 897.6 | 851.4 | 1,015.7 | 897.9 | 752.4 | 1,091.1 |
| Harvesting machinery 1/..... | 1,613.5 | 1,625.1 | 2,092.9 | 1,765.7 | 1,553.1 | 3,095.6 |
| Haying machinery 1/..... | 1,496.4 | 1,172.4 | 814.2 | 705.3 | 638.6 | 848.0 |
| Plows, harrows, rollers, pulverizers, cultivators, and weeders 1/..... | 403.2 | 425.8 | 519.8 | 501.0 | 464.7 | 631.2 |
| Commercial turf and grounds care equipment 2/..... | 1,836.3 | 1,697.2 | 1,691.3 | 2,239.1 | 1,656.8 | 1,361.6 |
| Consumer nonriding lawn, garden, and snow equipment 3/..... | 2,918.1 | 2,609.1 | 2,740.1 | 2,766.8 | 3,082.5 | 2,979.1 |
| Consumer riding lawn, garden, and snow equipment 3/..... | 3,797.5 | 3,330.2 | 2,973.9 | 3,446.0 | 3,388.9 | 3,276.8 |

1/A "Parts" category and a 7-digit product class total from Table 2 have been summed to derive the product group totals.

2/The 7-digit product class total from Table 2 already includes the "Parts and attachments" from this product group.

3/The "Part and attachments" categories for lawn and garden equipment have been added to the 7-digit product class total from Table 2.

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2003 | | 2002 | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|------------|-----------|------------|
| | | | Quantity | Value | Quantity | Value |
| 333111 | Farm machinery and equipment, including parts and attachments | (NA) | (X) | 12,846,554 | (X) | 12,392,824 |
| 3331111 | Wheel tractors (except contractors' off-highway wheel tractors, garden tractors, turf tractors, and motor tillers) and attachments | (NA) | (X) | (D) | (X) | (D) |
| | Wheel tractors, farm-type (PTO hp) | (NA) | (X) | (D) | (X) | (D) |
| 3331111101 | 2-wheel drive, including front wheel assist types | 5 | (D) | (D) | (D) | (D) |
| 3331111106 | 4-wheel drive, including tractors with, equal size tires, front and rear | 3 | (D) | (D) | (D) | (D) |
| 3331111111 | Attachments for wheel tractors, farm-type..... | 11 | (X) | 69,785 | (X) | 74,730 |
| 333111C116 | Parts for wheel tractors, farm-type | 11 | (X) | (D) | (X) | (D) |
| 3331113 | Farm dairy machines, sprayers, dusters, elevators, and farm blowers | (NA) | (X) | 664,400 | (X) | 657,103 |
| 3331113 pt. | Farm dairy machines and equipment | 14 | (X) | 99,084 | (X) | a/ 112,758 |
| | Mechanical installations: | | | | | |
| 3331113101 | Milking machines, complete, suspended and floor-type bucket, single and double units | 4 | (D) | (D) | (D) | (D) |
| 3331113104 | Pipeline milking units, complete, including claws, shells, inflations, air tubes, with or without pulsator | 6 | (D) | (D) | 22,685 | 18,638 |
| | Other farm dairy machines and equipment..... | 11 | (X) | a/ 43,671 | (X) | a/ 51,616 |
| | Attachments for farm dairy machines and equipment | 4 | (X) | (D) | (X) | (D) |
| | Parts for farm dairy machines and equipment, replacement units only..... | 8 | (X) | (D) | (X) | 58,172 |
| 3331113 pt. | Sprayers and dusters | (NA) | (X) | 565,316 | (X) | 510,130 |
| | Power sprayers, field and row crop types only: | | | | | |
| 3331113116 | Self-propelled | 10 | 3,036 | 339,360 | a/ 2,614 | 301,445 |
| 3331113121 | Tractor mounted | 20 | a/ 6,764 | b/ 17,098 | 8,984 | 19,321 |
| | Other than tractor mounted: | | | | | |
| 3331113124 | Power take-off driven, piston pump type..... | 7 | a/ 534 | 2,143 | a/r/ 752 | r/ 3,154 |
| 3331113128 | Nonpiston pump type | 11 | b/ 1,102 | b/ 4,372 | a/ 881 | a/ 4,292 |
| 3331113132 | Other power sprayers, over 4 g.p.m. | 5 | (X) | (D) | (X) | (D) |
| | Power sprayers, other than row crop and field types, over 4 g.p.m.: | | | | | |
| 3331113136 | Power take-off driven | 5 | b/ 256 | b/ 2,185 | 263 | 2,458 |
| 3331113141 | Engine-driven | 10 | b/ 926 | b/ 4,330 | a/ 904 | r/ 4,194 |
| 3331113144 | Air carried type power sprayers (field, row crop, and orchard types) | 4 | 590 | c/ 4,104 | 533 | c/ 3,870 |
| 3331113148 | Foggers and mist sprayers portable..... | 3 | (D) | (D) | (D) | (D) |
| 3331113152 | Hand-pulled and garden-type, 4 g.p.m. and under | 10 | (D) | (D) | 113,156 | (D) |
| 3331113156 | Sprayers, agricultural hand: | | | | | |
| | Under 1 gallon..... | 4 | 766,046 | 3,422 | 774,597 | 3,835 |
| | 1 gallon and over: | | | | | |
| 3331113161 | Compressed air or gas | 6 | 7,921,905 | 122,482 | 7,529,525 | 104,456 |
| 3331113164 | Other, including knapsack, hose end and flame sprayers and sprayer pumps..... | 7 | (X) | 18,470 | (X) | 19,167 |
| 3331113168 | Dusters, power, hand, all types | 6 | b/ (D) | a/ 631 | (D) | 782 |
| 3331113172 | All other sprayers | 6 | (X) | a/ 749 | (X) | 818 |
| 3331113176 | Attachments for sprayers and dusters | 9 | (X) | 15,283 | (X) | 12,229 |
| 333111C223 | Parts for sprayers and dusters, replacement units only..... | 53 | (X) | 33,095 | (X) | 25,253 |
| 3331113 pt. | Farm elevators and blowers | (NA) | (X) | (D) | (X) | 34,215 |
| | Farm elevators, portable: | | | | | |
| 3331113181 | Single and double chain | 8 | c/ 3,566 | c/ 6,823 | 3,658 | 6,935 |
| 3331113188 | Auger type | 7 | c/ 5,925 | b/ 11,394 | b/ 5,216 | 10,920 |
| | Other farm portable and stationary augers and elevators | 8 | (X) | b/ 9,456 | (X) | a/ 13,303 |
| 3331113192 | Other farm blowers, including forage blowers, combination grain and forage blowers | 6 | (X) | b/ 1,801 | (X) | 2,055 |
| | Attachments for farm elevators and blowers..... | 1 | (X) | (D) | (X) | 34,215 |

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2003 | | | | 2002 | | | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|--------|-----------|--------|----------|--------|---------|-----------|
| | | | Quantity | | Value | | Quantity | | Value | |
| | Parts for farm elevators and for grain and forage blowers, replacement units only..... | 1 | (X) | a/ | 1,122 | | (X) | | 1,595 | |
| 3331117 | Planting, seeding, and fertilizing machinery | (NA) | (X) | a/ | 856,444 | | (X) | | 802,702 | |
| 3331117101 | Corn planters, corn and cotton planters, and lister plant pull-type and mounted (total rows mounted)..... | 25 | (D) | | (D) | | (D) | | (D) | |
| 3331117108 | Grain drills (fixed frame), all types | 7 | 45,280 | | 179,503 | | 48,299 | | 174,228 | |
| 3331117111 | Transplanters (pull-type or mounted) and broadcast seeders (end-gate, mounted and drawn) | 12 | a/ | 16,927 | a/ | 88,935 | a/ | 6,271 | a/ | 89,311 |
| | Fertilizer distributors (pull-type or mounted): | | | | | | | | | |
| 3331117118 | Dry, including lime spreaders..... | 7 | c/ | 7,111 | b/ | 4,328 | c/ | 7,646 | | 4,942 |
| 3331117121 | Liquid and anhydrous ammonia..... | 24 | a/ | 8,708 | | 40,607 | a/ | 9,087 | a/ | 39,572 |
| 3331117128 | Manure spreaders, rear discharge..... | 15 | | 5,149 | | 19,250 | | 5,407 | | 18,317 |
| 3331117131 | Manure spreaders, side discharge..... | 13 | a/ | 5,928 | a/ | 33,277 | | 6,512 | | 37,929 |
| 3331117138 | Manure pumps, liquid..... | 3 | b/ | 1,482 | a/ | 19,947 | a/ | 2,238 | | 29,093 |
| 3331117141 | Front and rear tractor mounted loaders (farm-type), manure and general utility (except beet and sugar cane loaders) | 7 | (D) | | (D) | | b/ | 966 | b/r/ | 5,042 |
| 3331117148 | Row crop unit planters (quantity in rows) | 11 | 54,501 | | 125,226 | | r/ | 50,551 | r/ | 110,957 |
| 3331117151 | Other planting, seeding, and fertilizing machinery..... | 10 | (X) | a/ | 44,125 | | (X) | | | 54,965 |
| 3331117158 | Attachments for planting, seeding, and fertilizing machinery | 10 | (X) | a/ | 15,716 | | (X) | r/ | | 12,950 |
| 333111C229 | Parts for planting, seeding, and fertilizing machinery, replacement units only | 26 | (X) | | 41,145 | | (X) | | | 48,673 |
| 3331119 | Harvesting machinery..... | (NA) | (X) | | 1,537,522 | | (X) | a/ | | 1,541,756 |
| 3331119101 | Combines (harvester-threshers), grain-types only (self-propelled and pull-type) | 10 | (D) | | (D) | | (D) | | (D) | |
| 3331119111 | Small grain header for combines, all sizes | 6 | (D) | | (D) | | (D) | | (D) | |
| 3331119121 | Corn heads, all sizes | 6 | 8,471 | | 129,137 | | 9,921 | | 138,291 | |
| 3331119131 | Other grain-type combines | 2 | (X) | | (D) | | (X) | | (D) | |
| | Field forage harvesters: | | | | | | | | | |
| 3331119141 | Shear bar, self-propelled type and pull-type (basic machines) | 3 | 111 | | 6,292 | | 112 | | | 6,331 |
| 3331119151 | Attachments for shear bar type forage harvester | 1 | (X) | | (D) | | (X) | | (D) | |
| 3331119161 | Flail-type (horizontal knives or vertical free-swinging knives or hammers), including discharge spouts | 3 | b/ | 20,074 | c/ | 1,399 | | 30,461 | | 1,423 |
| 3331119171 | Other harvesting machinery, including potato diggers, cane harvesting equipment, and picker-shellers | 45 | (X) | | 1,355 | | (X) | | | 751 |
| 3331119181 | Attachments for harvesting machinery, including platform and seeder, reel, straw spreaders, load levelers, weed stripper, grate unit, knife grinders, and stalk walkers..... | 22 | (X) | | 3,615 | | (X) | | | 3,681 |
| 333111C22A | Parts for harvesting machinery, replacement units only | 52 | (X) | | 75,983 | | (X) | | | 83,325 |
| 333111A | Haying machinery | (NA) | (X) | | 1,324,572 | | (X) | r/ | | 1,015,272 |
| 333111A101 | Mowers, cutter bar type, including drum and disk | 8 | (D) | | (D) | | 2,799 | | | 274,850 |
| 333111A111 | Mower-conditioners and windrowers with conditioner auger and draper-type (pull-type and self-propelled) | 8 | 19,457 | | 313,337 | | 14,740 | | | 228,511 |
| 333111A121 | Rakes, side delivery, cylinder type, and finger wheel type | 11 | 9,005 | a/ | 39,766 | | 9,812 | r/ | | 42,593 |
| 333111A131 | Hay balers, hay stackers, (field type), hay bale loaders, bale throwing attachments | 10 | (D) | | (D) | | r/ | 15,467 | r/ | 271,935 |
| 333111A141 | Other haying machinery | 16 | (X) | c/ | 134,265 | | (X) | | (D) | |
| 333111A151 | Other attachments for haying machinery (stripper, bale chute and knife attachments)..... | 10 | (X) | | (D) | | (X) | | (D) | |
| 333111C22C | Parts for haying machinery, replacement units only | 24 | (X) | a/ | 171,787 | | (X) | r/ | | 157,136 |
| 333111E | Plows, harrows, rollers, pulverizers, cultivators, and weeders | (NA) | (X) | | 361,963 | | (X) | | | 381,611 |

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2003 | | | | 2002 | | | |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|-----------|-----------|---------|----------|--------|-----------|---------|
| | | | Quantity | | Value | | Quantity | | Value | |
| 333111E pt. | Plows (primary tillage equipment) | (NA) | (X) | a/ | 87,951 | | (X) | | 94,277 | |
| 333111E101 | Subsoilers, deep tillage | 24 | a/ | 1,324,572 | a/ | 171,787 | 651,018 | | 157,136 | |
| 333111E109 | Terracing and ditching plows | 10 | a/ | 3,990 | a/ | 33,585 | 4,141 | | 34,806 | |
| | Chisel plows, deep tillage (chisel or sweep type): | | | | | | | | | |
| 333111E111 | Pull-type | 11 | | 451 | | 1,317 | 456 | | 1,297 | |
| 333111E119 | Mounted | 13 | b/ | 1,032 | c/ | 17,225 | 1,038 | | 17,822 | |
| 333111E121 | Other plows (except snow plows) | 14 | (X) | | | 1,979 | (X) | | 2,197 | |
| 333111E159 | Middlebusters and disc bedders | 15 | | 2,047 | | 8,852 | 2,737 | | 11,595 | |
| 333111E131 | Attachments for plows (coulters, jointers, root cutters subsoilers, fertilizer distributors, etc.), excluding lister planting attachments | 21 | (X) | | | 2,990 | (X) | | 2,713 | |
| 333111E139 | Plowshares (quantity in thousands of pounds) | 6 | c/ | 3,262 | c/ | 18,441 | b/r/ | 2,898 | r/ | 20,008 |
| 333111C22E | Parts for plows (except plowshares, replacement units only) | 19 | (X) | b/ | 3,290 | | (X) | r/ | 3,654 | |
| 333111E pt. | Harrows, rollers, pulverizers and similar equipment (secondary tillage) | (NA) | (X) | b/ | 185,717 | | (X) | | 184,822 | |
| 333111E141 | Spike-tooth harrow sections and spring-tooth and tine-tooth harrow sections | 8 | | 856,444 | | 94,758 | 802,702 | | 99,569 | |
| 333111E149 | Disc harrows, single, tandem, and offset | 17 | b/ | 16,014 | a/ | 7,199 | 16,946 | | 8,241 | |
| 333111E151 | Combination tillage equipment, roller/harrows, disc or coulters/field cultivators, disc or coulters/spring tooth | 20 | c/ | 12,638 | | 76,130 | 12,825 | | 75,733 | |
| 333111E158 | Blade terracers or scrapers (farm-size) | 26 | b/ | 5,201 | b/ | 27,276 | r/ | 5,576 | r/ | 27,881 |
| 333111E161 | Land levelers | 32 | | 41,657 | a/ | 26,170 | 37,239 | | 22,487 | |
| 333111E169 | Other harrows, rollers, pulverizers, and similar equipment | 10 | (X) | | | 9,925 | (X) | | 9,178 | |
| 333111E171 | Attachments for harrows, rollers, pulverizers, and similar equipment | 16 | (X) | | | 6,161 | (X) | | 6,900 | |
| 333111C22G | Parts for harrows, rollers, pulverizers, and similar equipment, replacement units only..... | 37 | (X) | b/ | 11,841 | | (X) | r/ | 12,232 | |
| 333111E pt. | Cultivators and weeders | (NA) | (X) | a/ | 88,295 | | (X) | | 102,512 | |
| 333111E179 | Corn and cotton type cultivators, shank and sweep type (front and rear mounted)..... | 16 | c/ | 864 | a/ | 4,615 | c/r/ | 1,051 | a/r/ | 5,508 |
| 333111E181 | Rotary cultivators, ground and power driven..... | 8 | c/ | 3,400 | c/ | 7,321 | c/r/ | 3,252 | r/ | 7,067 |
| 333111E189 | Field cultivators | 14 | b/ | 4,781 | | 45,677 | b/r/ | 5,379 | | 54,422 |
| 333111E191 | Other cultivators and weeders, including tool bars (basic units) | 17 | (X) | | a/ | 4,573 | (X) | a/ | 7,183 | |
| 333111E199 | Attachments for cultivators and weeders (front mounting frame, disc weeders, rear section, and drawbars) | 21 | (X) | b/ | 26,109 | | (X) | b/ | 28,332 | |
| 333111C22J | Parts for cultivators and weeders, replacement units only | 27 | (X) | a/ | 26,039 | | (X) | r/ | 27,110 | |
| 333111G | All other farm machinery and equipment (except parts) | (NA) | (X) | | 1,967,301 | | (X) | | 1,846,670 | |
| 333111G pt. | Stalk shredders and cutters or rotary mowers (PTO) | 39 | (X) | b/ | 219,512 | | (X) | | 231,130 | |
| 333111G102 | Flail type (without spout) | 15 | a/ | 1,961 | b/ | 13,439 | a/r/ | 1,846 | b/r/ | 11,893 |
| | Horizontal blade type: | | | | | | | | | |
| 333111G104 | 66 inches cutting width and under | 24 | b/ | 83,045 | b/ | 49,132 | 80,386 | | 46,169 | |
| 333111G106 | Over 66 inches up to 100 inches cutting width | 21 | b/ | 52,950 | b/ | 66,466 | 52,319 | | 68,674 | |
| 333111G108 | Over 100 inches cutting width | 16 | a/ | 11,486 | a/ | 90,475 | r/ | 13,742 | r/ | 104,394 |
| 333111C22L | Parts for stalk shredders, and cutters or rotary mowers (PTO), replacement units only..... | 27 | (X) | b/ | 32,980 | | (X) | | 34,112 | |
| 333111G pt. | Machines for preparing crops for market or for use | (NA) | (X) | a/ | 198,264 | | (X) | a/ | 197,925 | |
| 333111G112 | Feed grinders and crushers, power | 12 | (D) | | (D) | | (D) | | (D) | |
| 333111G114 | Feed mixers, farm-size, stationary and portable | 16 | | 1,038 | | 42,818 | 1,131 | | 39,370 | |
| 333111G116 | Combination grinder-mixers | 4 | (D) | | (D) | | (D) | | (D) | |
| 333111G117 | Cotton ginning machinery..... | (NA) | - | | - | | - | | - | |
| | Dryers (grain, hay, and seed): | | | | | | | | | |
| 333111G118 | Heated air crop dryers | 14 | b/ | 4,147 | a/ | 29,531 | b/r/ | 3,443 | a/r/ | 21,157 |
| 333111G122 | Crop drying fans (over 15,000 c.f.m. at approximately 1-inch pressure) | 7 | | 6,767 | a/ | 5,669 | r/ | 6,786 | r/ | 5,725 |

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2003 | | | 2002 | | |
|--------------|-----------------------------------------------------------------------------------------------------------|-------------|----------|------------|---------|----------|----------------|------------|
| | | | Quantity | | Value | Quantity | | Value |
| 333111G124 | Other machines for preparing crops for market or for use | 33 | (X) | a/ | 56,798 | (X) | | 62,371 |
| 333111G126 | Attachments for machines for preparing crops for market or for use | 13 | (X) | | 7,395 | (X) | r/ | 7,680 |
| 333111C22N | Parts for machines for preparing crops for market or for use, replacement units only..... | 38 | (X) | a/ | 37,099 | (X) | a/ | 37,878 |
| 333111G pt. | Farm poultry equipment | (NA) | (X) | a/ | 276,052 | (X) | r/ | 273,675 |
| 333111G128 | Incubators, quantity represents egg capacity in thousands | 8 | c/ | 44,681,588 | b/ | 22,998 | 45,619,334 | 44,523 |
| 333111G132 | Brooders, floor and hanging (gas, electric, oil, coal, wood and battery) | 11 | a/ | 584,419 | b/ | 39,399 | r/ 287,425 | 35,617 |
| 333111G134 | Nests and cages | 9 | (D) | | (D) | a/r/ | 1,506,022 | r/ 24,184 |
| 333111G136 | Poultry feeders (trough, hanging, and mechanical) and waterers (except turkey feeders and waterers) | 12 | | 6,233,985 | | 64,212 | a/r/ 5,881,405 | r/ 62,303 |
| 333111G138 | Other farm poultry equipment, including turkey waterers, mechanized egg graders, and egg washers | 17 | (X) | | 112,713 | (X) | r/ | 98,685 |
| 333111G142 | Attachments for farm poultry equipment..... | 14 | (X) | a/ | 7,408 | (X) | | 8,363 |
| 333111C22P | Parts for farm poultry equipment, replacement units only..... | 15 | (X) | | (D) | (X) | | 16,983 |
| 333111G pt. | Hog equipment | (NA) | (X) | | 101,090 | (X) | | 121,471 |
| 333111G144 | Feeding equipment | 24 | a/ | 66,091 | | 15,072 | a/r/ 147,728 | 48,933 |
| 333111G146 | Handling equipment | 13 | a/ | 393,538 | | 25,838 | a/ 484,109 | 35,582 |
| 333111G148 | Watering equipment | 17 | a/ | 354,014 | a/ | 4,244 | | 386,374 |
| 333111G152 | Other hog equipment | 21 | (X) | | 54,937 | (X) | | 32,206 |
| 333111G154 | Attachments for hog equipment | 10 | (X) | | 999 | (X) | | 1,368 |
| 333111C22T | Parts for hog equipment, replacement units only | 15 | (X) | | (D) | (X) | | (D) |
| 333111G pt. | Other barn and barnyard equipment | (NA) | (X) | a/ | 339,851 | (X) | | 218,568 |
| 333111G156 | Silo and grain bin unloaders, forage and grain, including sealed storage unloaders (farm-type) | 13 | (D) | | (D) | c/ | 3,811 | 22,241 |
| 333111G158 | Cattle and dairy barn equipment: Feeding equipment | 28 | | 100,368 | a/ | 51,948 | 93,140 | 49,306 |
| 333111G162 | Handling equipment | 29 | | 785,899 | a/ | 45,575 | 786,350 | b/ 50,974 |
| 333111G164 | Water equipment | 21 | | 429,131 | b/ | 41,245 | 412,210 | 43,199 |
| 333111G166 | Other barn and barnyard equipment | 33 | (X) | | 20,426 | (X) | | 22,343 |
| 333111G168 | Attachments for barn and barnyard equipment..... | 18 | (X) | | 36,543 | (X) | | 30,505 |
| 333111C22U | Parts for barn and barnyard equipment, replacement units only | 25 | (X) | | (D) | (X) | | 15,884 |
| 333111G pt. | Farm wagons, and other farm transportation equipment | (NA) | (X) | a/ | 130,960 | (X) | | 126,269 |
| 333111G172 | Wagons (chassis only) and trailer gears, excluding motor trucks, 4-wheel..... | 30 | a/ | 15,631 | a/ | 33,603 | 16,927 | 35,808 |
| 333111G174 | Boxes and racks for mounting on wagons and trailer gears: Manual unloading or dump | 6 | | 1,814 | | 7,030 | 1,035 | 3,688 |
| 333111G176 | Gravity unloading, grain-type only..... | 7 | | 5,089 | | 6,317 | 5,270 | 6,590 |
| 333111G178 | Power unloading | 15 | | 2,418 | | 25,301 | 2,486 | 24,866 |
| 333111G182 | Boxes with integral running gear, grain- and forage-types | 11 | | 3,215 | | 26,695 | r/ 3,156 | r/ 23,553 |
| 333111G184 | Other farm transportation equipment | 17 | (X) | a/ | 30,601 | (X) | | 30,007 |
| 333111G186 | Attachments for farm transportation equipment | 9 | (X) | | (D) | (X) | | 1,757 |
| 333111C232 | Parts for farm transportation equipment, including operator cabs for farm tractors..... | 30 | (X) | | (D) | (X) | | (D) |
| 333111G pt. | Irrigation systems | (NA) | (X) | | 701,572 | (X) | b/ | 677,632 |
| 333111G188 | Self-propelled irrigation systems, center-pivot (quantity is in ten-tower equivalents)..... | 7 | | 21,177 | | 619,313 | 20,584 | a/ 593,482 |
| 333111G192 | All other systems using 100-foot flexible hose feeder line and over | 8 | (X) | | (D) | (X) | | (D) |
| 333111C22V | Parts for irrigation systems, replacement units only..... | 7 | (X) | | 701,572 | (X) | | 677,632 |

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2003 | | 2002 | |
|--------------|------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|--------------|--------------|--------------|
| | | | Quantity | Value | Quantity | Value |
| 333111J | Commercial turf and grounds care equipment, including parts and attachments | (NA) | (X) | 1,836,325 | (X) | 1,697,187 |
| 333111J pt. | Commercial turf and grounds mowing equipment..... | (NA) | (X) | 1,512,763 | (X) | 1,387,773 |
| 333111J101 | Powered nonriding mowers | 17 | 70,873 | 119,798 | 76,646 | 124,826 |
| 333111J106 | Riding reel-type turf mowers, including greens mowers | 5 | (D) | (D) | (D) | (D) |
| 333111J111 | Riding rotary turf mowers | 20 | 127,230 | 858,158 | 106,940 | 738,210 |
| 333111J116 | Gang rotary cutting units, reel and rotary, individual sections | 8 | 45,152 | 75,387 | (D) | 75,324 |
| 333111J121 | Flail mower cutting units, including gang..... | 6 | 701 | 6,846 | 705 | 7,516 |
| 333111J126 | Other mowing equipment | 8 | (X) | (D) | (X) | r/ 46,389 |
| 333111J131 | Parts for commercial turf and grounds mowing equipment | 34 | (X) | 152,304 | (X) | 149,652 |
| 333111J136 | Attachments for commercial turf and grounds mowing equipment | 21 | (X) | 65,764 | (X) | 65,076 |
| 333111J pt. | Other commercial turf and grounds care equipment | (NA) | (X) | 323,562 | (X) | 309,414 |
| 333111J141 | Sod cutters and sod harvesters | 3 | (D) | (D) | (D) | (D) |
| 333111J146 | Seeders, spreaders, and top dresser attachments... | 10 | 677,599 | b/ 24,484 | 805,899 | 25,031 |
| 333111J151 | Aerators, spikers, and pluggers | 14 | b/ 13,931 | b/ 25,486 | 12,559 | 21,569 |
| 333111J156 | Dethatchers | 12 | 69,325 | 12,370 | 58,506 | r/ 18,390 |
| 333111J161 | Power brooms, blowers, vacuums, and sweepers | 15 | 18,330 | 30,738 | 15,023 | 25,032 |
| 333111J166 | Irrigation systems (except agricultural and residential) | 2 | (D) | (D) | (D) | (D) |
| 333111J171 | Other commercial turf and grounds care equipment, including trap rakes, transport trailers and turf tractors and trucks..... | 23 | (X) | b/ 141,317 | (X) | 136,215 |
| 333111J176 | Parts for other commercial turf and grounds care equipment | 25 | (X) | a/ 32,695 | (X) | 28,636 |
| 333111J181 | Attachments for other commercial turf and and grounds care equipment | 19 | (X) | a/ 40,779 | (X) | 39,066 |
| 333112 | Lawn and garden equipment | (NA) | (X) | 6,715,549 | (X) | 5,939,249 |
| 3331121 pt. | Consumer nonriding lawn, garden, and snow equipment | (NA) | (X) | 2,739,515 | (X) | r/ 2,463,312 |
| 3331121104 | Lawnmowers: Push-type: reel (powered and nonpowered) rotary-gas powered | 16 | 3,755,788 | 520,155 | 3,485,743 | 517,874 |
| 3331121106 | Rotary, self-propelled, gas-powered | 16 | 2,104,733 | 524,391 | 1,863,613 | 443,412 |
| 3331121121 | Electric, all types, including battery-powered..... | 5 | (D) | (D) | (D) | (D) |
| 3331121126 | Rotary garden motor tillers | 11 | 541,413 | 144,456 | r/ 466,985 | 121,041 |
| 3331121131 | 2-wheel tractors walking type (except rotary tillers) | 3 | (D) | (D) | 482 | (D) |
| 3331121136 | Snow throwers (snow blowers) (except attachment-type): Single stage | 7 | 382,805 | 125,985 | 309,044 | 96,917 |
| 3331121141 | Dual stage | 6 | 519,126 | 314,663 | 320,753 | 197,958 |
| 3331121146 | Powered lawn edgers/trimmers: Fixed blade | 11 | 1,219,895 | 213,079 | r/ 1,275,595 | r/ 234,085 |
| 3331121151 | Other than fixed blades | 11 | 6,029,821 | 419,714 | 5,570,696 | 388,579 |
| 3331121156 | Shredders and shredder-grinders | 4 | 192,403 | 54,283 | r/ 158,873 | r/ 47,818 |
| 3331121161 | Yard vacuums and blowers | 7 | 2,310,401 | 239,303 | r/ 3,024,476 | r/ 292,532 |
| 3331121166 | Other consumer nonriding lawn, garden, and snow equipment | 16 | (X) | 103,857 | (X) | 77,289 |
| 3331123 pt. | Consumer riding lawn, garden, and snow equipment | (NA) | (X) | a/ 3,044,714 | (X) | 2,711,818 |
| 3331123101 | Lawn tractors and riding mowers, front engine: Under 10.0 hp (under 7.5 kW) | 3 | (D) | (D) | (D) | (D) |
| 3331123111 | 10.0 hp and over (7.5 kW and over) | 8 | 1,692,098 | 2,010,688 | 1,458,934 | 1,817,567 |
| 3331123121 | Lawn tractors and riding mowers, rear engine: Under 10.0 hp (under 7.5 kW) | 5 | (D) | (D) | (D) | (D) |
| 3331123131 | 10.0 hp and over (7.5 kW and over) | 14 | 123,862 | 193,964 | 83,332 | 129,499 |
| 3331123141 | Garden tractors: Under 16.0 hp (under 12.0 kW) | 6 | (D) | (D) | (D) | (D) |
| 3331123151 | 16.0 hp to 19.9 hp (12.0 kW to 14.9 kW)..... | 6 | (D) | (D) | (D) | (D) |
| 333113161 | 20.0 hp and over (15.0 kW and over) | 10 | 192,882 | 501,724 | 124,963 | 277,501 |

Continued

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2003 | | 2002 | |
|--------------|---------------------------------------------------------------------------|-------------|----------|---------|----------|---------|
| | | | Quantity | Value | Quantity | Value |
| 3331123171 | Other consumer riding lawn, garden, and snow equipment | 6 | (X) a/ | 36,020 | (X) b/r/ | 35,827 |
| 3331127 pt. | Parts and attachments for consumer lawn, garden, and snow equipment | (NA) | (X) | 931,320 | (X) r/ | 764,119 |
| 3331127101 | Nonriding: Parts | 33 | (X) | 131,151 | (X) | 109,584 |
| 3331127111 | Attachments | 12 | (X) | 47,400 | (X) | 36,157 |
| | Riding: Parts: | | | | | |
| 3331127121 | For tractors and riding mowers | 22 | (X) | 406,907 | (X) | 338,858 |
| 3331127131 | For other equipment | 7 | (X) a/ | 6,712 | (X) a/ | 6,197 |
| | Attachments: | | | | | |
| 3331127141 | Rotary mower decks | 9 | (X) | 95,676 | (X) | 55,430 |
| 3331127151 | Rotary tiller attachments | 10 | (X) | 6,833 | (X) | 6,778 |
| 3331127161 | Blades, dozer | 12 | (X) a/ | 28,819 | (X) | 24,982 |
| 3331127171 | Snow throwers | 9 | (X) | 29,654 | (X) | 24,457 |
| 3331127181 | Carts and wagons | 13 | (X) a/ | 38,701 | (X) r/ | 34,315 |
| 3331127191 | All other attachments | 26 | (X) | 139,467 | (X) | 127,361 |

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. pt. Partial. r/Revised by 5 percent or more from previously published data. X Not applicable.

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of the item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of item is estimated.

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product description | Manufacturers' shipments | | Exports of domestic merchandise 1/ | | Imports for consumption 2/ | | Apparent consumption | |
|----------------------------------------------------------------------------------------------------|--------------------------|---------|------------------------------------|---------|----------------------------|-----------|----------------------|---------|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| 2003 | | | | | | | | |
| Farm-type wheel tractors..... | (D) | (D) | 22,125 | 814,123 | 163,612 | 1,749,987 | (D) | (D) |
| Sprayers and dusters (except aerial types)..... | (X) | 550,033 | (X) | 51,849 | (X) | 24,363 | (X) | 522,547 |
| Planting machinery and fertilizer distributors, pull-type or mounted..... | (X) | 815,299 | 19,447 | 92,161 | 84,943 | 70,875 | (NA) | 794,013 |
| Disc harrows..... | 12,638 | 76,130 | 948 | 4,417 | 39,200 | 1,580 | 50,890 | 73,293 |
| Other harrows, rollers, pulverizers, and similar equipment | 72,561 | 97,746 | 4,239 | 5,117 | 53,605 | 16,923 | 121,927 | 109,552 |
| Combines..... | (D) | (D) | 4,190 | 395,386 | 4,509 | 36,349 | (D) | (D) |
| Other harvesting machines..... | 14,554 | 484,534 | 2,729 | 60,191 | 4,918 | 44,997 | 16,743 | 469,340 |
| Field forage harvesters..... | 914 | 21,429 | 1,007 | 12,173 | 2,065 | 60,463 | 1,972 | 69,719 |
| Hay mowers, mower-conditioners and windrowers..... | 174,019 | 891,935 | 16,666 | 43,190 | 63,705 | 137,181 | 221,058 | 985,926 |
| Other haymaking machines..... | (X) | (D) | 1,532 | 23,895 | 12,896 | 35,505 | (NA) | (D) |
| Balers, including pickup balers..... | 21,128 | 410,481 | 9,799 | 149,092 | 8,771 | 36,144 | 20,100 | 297,533 |
| Other plows..... | (X) | 66,220 | 4,956 | 10,306 | 19,582 | 4,589 | (NA) | 60,503 |
| Cultivators and weeders..... | 11,608 | 62,186 | 12,974 | 14,129 | 149,638 | 49,940 | 148,272 | 97,997 |
| Machinery for preparing animal feed..... | (D) | (D) | 4,424 | 34,640 | 79,795 | 34,900 | (D) | (D) |
| Other machines for preparing crops for market or for use..... | (D) | (D) | 3,572 | 21,043 | 46,071 | 5,453 | (D) | (D) |
| Farm poultry incubators and brooders..... | (X) | 62,397 | 14,879 | 9,353 | 88,606 | 1,598 | (NA) | 54,642 |
| Nests and cages (poultry equipment)..... | (X) | 29,322 | 84,844 | 55,617 | 110,696 | 18,463 | (NA) | (7,832) |
| Self-propelled irrigation systems, center-pivot..... | 21,177 | 619,313 | 1,609 | 34,961 | 107 | 704 | 19,675 | 585,056 |
| All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over..... | (D) | (D) | (X) | 185,581 | (X) | 44,881 | (X) | (D) |
| Farm wagons and other farm transportation equipment..... | 33,047 | 129,547 | - | - | 274,056 | 15,618 | 12,123 | 145,165 |
| Riding turf mowers and flail and gang mowers..... | (D) | (D) | 23877 | 69,037 | 11,684 | 5,785 | (D) | (D) |
| Snowblowers (snowthrowers)..... | 901,931 | 440,648 | 65,553 | 42,096 | 136,391 | 54,204 | 972,769 | 452,756 |
| Powered lawn and hedge trimmers..... | 7,249,716 | 632,793 | 550,113 | 52,117 | 1,447,059 | 97,601 | 8,146,662 | 678,277 |
| 2002 | | | | | | | | |
| Farm-type wheel tractors..... | (D) | (D) | 30,858 | 869,590 | 134,963 | 1,517,500 | (D) | (D) |
| Sprayers and dusters (except aerial types)..... | (X) | 497,901 | (X) | 45,640 | (X) | 32,620 | (X) | 484,881 |
| Planting machinery and fertilizer distributors, pull-type or mounted..... | (X) | 754,029 | 16,342 | 87,704 | 162,849 | 66,659 | (NA) | 732,984 |
| Disc harrows..... | 12,825 | 75,733 | 1,151 | 8,962 | 73,818 | 1,591 | 85,492 | 68,362 |
| Other harrows, rollers, pulverizers, and similar equipment | 70,146 | 96,857 | 3,734 | 5,337 | 5,420 | 13,304 | 71,832 | 104,824 |
| Combines..... | (D) | (D) | 3,742 | 315,251 | 2,135 | 75,468 | (D) | (D) |
| Other harvesting machines..... | 16,156 | 501,496 | 2,396 | 34,338 | 11,268 | 52,436 | 25,028 | 519,594 |
| Field forage harvesters..... | 1,274 | 31,212 | 1,062 | 12,401 | 1,175 | 29,053 | 1,387 | 47,864 |
| Hay mowers, mower-conditioners and windrowers..... | 165,832 | 459,641 | 17,892 | 50,776 | 45,693 | 108,507 | 193,633 | 517,372 |
| Other haymaking machines..... | (X) | (D) | 1,507 | 19,522 | 12,931 | 26,719 | (NA) | (D) |
| Balers, including pickup balers..... | 15,467 | 271,935 | 7,421 | 99,421 | 6,794 | 37,245 | 14,840 | 209,759 |
| Other plows..... | (X) | 70,615 | 4,773 | 8,143 | 134,294 | 6,458 | (NA) | 68,930 |
| Cultivators and weeders..... | 13,247 | 74,180 | 9,745 | 13,429 | 151,162 | 38,265 | 154,664 | 99,016 |

Continued

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 2003 and 2002
[Quantity in units. Value in thousands of dollars]

| Product description | Manufacturers' shipments | | Exports of domestic merchandise 1/ | | Imports for consumption 2/ | | Apparent consumption | |
|----------------------------------------------------------------------------------------------------|--------------------------|---------|------------------------------------|---------|----------------------------|---------|----------------------|----------|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| Machinery for preparing animal feed..... | (D) | (D) | 5,118 | 31,506 | 47,797 | 36,935 | (D) | (D) |
| Other machines for preparing crops for market or for use..... | (D) | (D) | 3,271 | 23,743 | 26,601 | 4,985 | (D) | (D) |
| Farm poultry incubators and brooders..... | (X) | 80,140 | 27,130 | 13,793 | 118,618 | 2,603 | (NA) | 68,950 |
| Nests and cages (poultry equipment)..... | (X) | 24,184 | 59,100 | 47,997 | 112,095 | 10,155 | (NA) | (13,658) |
| Self-propelled irrigation systems, center-pivot..... | 20,584 | 593,482 | 2,136 | 42,122 | 72 | 315 | 18,520 | 551,675 |
| All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over..... | (D) | (D) | (X) | 189,955 | (X) | 25,259 | (X) | (D) |
| Farm wagons and other farm transportation equipment..... | 34,541 | 124,512 | - | - | 192,028 | 12,123 | 12,123 | 136,635 |
| Riding turf mowers and flail and gang mowers..... | (D) | (D) | 16483 | 69,456 | 8,110 | 2,703 | (D) | (D) |
| Snowblowers (snowthrowers)..... | 629,797 | 294,875 | 54,072 | 31,746 | 74,016 | 26,151 | 649,741 | 289,280 |
| Powered lawn and hedge trimmers..... | 6,846,291 | 622,664 | 464,843 | 39,560 | 2,351,550 | 147,931 | 8,732,998 | 731,035 |

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/Source: Census Bureau report, EM 545, U.S. Exports.

2/Source: Census Bureau report, IM 145, U.S. Imports for Consumption.

Note: For comparison of North American Industry Classification System (NAICS)-based product codes, Schedule B export codes, and HTSUSA import codes, see Table 4.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2003

| Product code | Product description | Export code 1/ | Import code 2/ |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 333111101, 106, 3331123141, 151, 161 | Farm-type wheel tractors..... | 8701.90.1005 8701.90.1010 8701.90.1015 8701.90.1030 8701.90.1035 8701.90.1040 8701.90.1045 8701.90.1050 8701.90.1055 8701.90.1060 8701.90.1065 8701.90.1070 | 8701.90.1005 8701.90.1010 8701.90.1015 8701.90.1030 8701.90.1035 8701.90.1040 8701.90.1045 8701.90.1050 8701.90.1055 8701.90.1060 8701.90.1065 8701.90.1070 |
| 3331113116, 121, 124, 128, 132, 136, 141, 144, 148, 152, 156, 161, 164, 168, 172 | Sprayers and dusters (except aerial types)..... | 8424.81.1000 8424.81.9030 | 8424.81.1000 8424.81.9040 8424.81.9090 |
| 3331117101, 108, 111, 148 | Planting machinery..... | 8432.30.0010 8432.30.0090 | 8432.30.0010 8432.30.0090 |
| 3331117118, 121, 128, 131, 138, 141, 151 | Fertilizer distributors pull-type or mounted..... | 8432.40.0000 | 8432.40.0000 |
| 333111E141, 151, 158, 161, 169 | Other harrows, rollers, pulverizers, and similar equipment..... | 8432.29.0090 | 8432.29.0090 |
| 333111E149 | Disc harrows..... | 8432.21.0000 | 8432.21.0000 |
| 3331119101 | Combines..... | 8433.51.0010 8433.51.0090 | 8433.51.0010 8433.51.0090 |
| 3331119111, 121, 131, 171 | Other harvesting machines..... | 8433.52.0000 8433.59.0090 8433.53.0000 | 8433.52.0000 8433.59.0090 8433.53.0000 |
| 3331119141, 161 | Field forage harvesters..... | 8433.59.0010 | 8433.59.0010 |

Continued

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2003

| Product code | Product description | Export code 1/ | Import code 2/ |
|--------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|
| 333111A101, 111, 333111G102, 104, 106, 108 | Hay mowers, mower-conditioners and windrowers..... | 8433.20.0020 8433.20.0040 8433.20.0060 | 8433.20.0020 8433.20.0040 8433.20.0060 |
| 333111A121, 141 | Other haymaking machinery..... | 8433.30.0000 | 8433.30.0000 |
| 333111A131 | Balers, including pickup balers..... | 8433.40.0000 | 8433.40.0000 |
| 333111E101, 109, 111, 119, 121, 159 | Other plows..... | 8432.10.0040 8432.10.0060 | 8432.10.0040 8432.10.0060 |
| 333111E179, 181, 189, 191 | Cultivators and weeder..... | 8432.29.0040 8432.29.0060 8432.29.0080 | 8432.29.0040 8432.29.0060 8432.29.0080 |
| 333111G112, 114, 116 | Machinery for preparing animal feed..... | 8436.10.0000 | 8436.10.0000 |
| 333111G124, 118, 122 | Other machines for preparing crops for market or for use..... | 8419.31.0000 8436.80.0060 | 8419.31.0000 8436.80.0060 |
| 333111G128, 132 | Farm poultry incubators and brooders..... | 8436.21.0000 | 8436.21.0000 |
| 333111G134 | Nests and cages (poultry equipment)..... | 8436.29.0000 8433.60.0000 | 8436.29.0000 8433.60.0000 |
| 333111G188 | Self-propelled irrigation systems, center-pivot..... | 8424.81.9010 | 8424.81.9010 |
| 333111G192 | All other self-propelled irrigation systems using 100 feet flexible hose feeder line and over..... | 8424.81.9020 | 8424.81.9020 |
| 333111G172, 174, 176, 178, 182, 184 | Farm wagons and other farm transportation equipment..... | 8716.80.1000 | 8716.80.1000 |
| 333111J101, 126 | Other commercial and turf grounds mowers..... | 8433.19.0040 8433.19.0050 | 8433.19.0040 8433.19.0050 |

Continued

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2003

| Product code | Product description | Export code 1/ | Import code 2/ |
|-------------------------|--------------------------------------|------------------------------|------------------------------|
| 333111J106, 111, 116 | Riding turf mowers..... | 8433.19.0010 8433.19.0030 | 8433.19.0010 8433.19.0030 |
| 333111J121 | Flail and gang mowers..... | 8433.19.0020 | 8433.19.0020 |
| 3331121136, 141 | Snowblowers (snowthrowers)..... | 8430.20.0060 | 8430.20.0060 |
| 3331121146, 151 | Powered lawn and hedge trimmers..... | 8467.89.5030 | 8467.89.5030 |

1/Source: 2003 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated, (2003).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and

returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on farm machinery and equipment have been collected by the Census Bureau since 1920; data on lawn and garden equipment since 1978. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.